Am ndments to the Claims:

1   1. (Currently amended)   A method of calculating capacity of an intelligent battery

2   equipped with a current measurement circuit to measure an electric current value on

3   which calculation of battery capacity is based, comprising the steps of:

4

5   (a) sending, from a system to the an SBS-compliant intelligent battery, a notice

6   that it shifts to a low electric power consumption mode, and a consumption electric

7   current value or a consumption electric power value in the low electric power

8   consumption mode unique to the system, when the system using the intelligent battery

9   shifts from a normal operational mode to the low electric power consumption mode,

10 the notice being defined in at least one command selected from among

11 OptionalMfgFunction1 to OptionalMfgFunction5 of SBS ;

12

13   (b) performing subtraction of capacity data of the intelligent battery based on

14 the received consumption electric current value or consumption electric power value

15 in the low electric power consumption mode, and disabling capacity calculation by the

16 current measurement circuit;

17

18   (c) sending, from the system to the intelligent battery, a notice of shifting to the

19 normal operational mode, and stopping the subtraction of capacity data based on the

20 consumption electric current value or consumption electric power value in the low

21 electric power consumption mode, and enabling capacity calculation by the current

22 measurement circuit, when the system using the intelligent battery shifts from the low

23 electric power consumption mode to the normal operational mode.

1   2.   (Previously Amended) The method of calculating capacity of an intelligent

2   battery according to Claim 1, wherein said low electric power consumption mode is

3   a soft-off state or a suspended state.

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3 (Canceled).

1   4 (Original)   The method of calculating capacity of an intelligent battery according to
2   Claim 1,
3
4   wherein, in the low electric power consumption mode:
5
6   (a) on detecting that the intelligent battery is drawn out of the system, the
7   subtraction of capacity data based on the received consumption electric current value
8   or consumption electric power value in the low electric power consumption mode is
9   stopped;
10
11   (b) next, on detecting that the intelligent battery is connected to the system, the
12 battery counts time from the connection; and
13
14   (c) when the system using the intelligent battery shifts from the low electric
15 power consumption mode to the normal operational mode:
16
17   (i) the system sends a notice is sent to the effect that it is reconnected
18   to the intelligent battery and also sends the consumption electric current value
19   or consumption electric power value in the low electric power consumption
20   mode unique to the system;
21
22   (ii) capacity to be subtracted from reconnection is calculated from the
23   received consumption electric current value or consumption electric power
24   value and the counted time, and the calculated capacity to be subtracted is
25   subtracted from the capacity data; and
26
27   (d) next, a notice is sent from the system to the intelligent battery to the effect

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28   that it shifts to the normal operational mod   and also the subtraction of capacity data

29   based on the consumption electric current value or consumption electric power value

30   in the low electric power consumption mode is stopped, and capacity calculation by

31   the current measurement circuit is enabled on the other hand.

1   5 (Original)   The method of calculating capacity of an intelligent battery according to

2   Claim 1,

3

4   wherein, in the low electric power consumption mode:

5

6   (a) on detecting that the intelligent battery is drawn out of the system, that the

7   intelligent battery stops the subtraction of capacity data based on the consumption

8   electric current value or consumption electric power value received in the low electric

9   power consumption mode;

10

11   (b) next, on detecting that the intelligent battery is connected to the system:

12

13   (i) the system recognizing the connection sends a notice to the effect that

14   it is reconnected to the intelligent battery and also sends the consumption

15   electric current value or consumption electric power value in the low electric

16   power consumption mode unique to the system;

17

18   (ii) the intelligent battery resumes subtraction of capacity data based on

19   the received consumption electric current value or consumption electric power

20   value in the low electric power consumption mode, and disables capacity

21   calculation by the current measurement circuit on the other hand;

22

23   (c) when the system using the intelligent battery shifts from the low electric

24   power consumption mode to the normal operational mode, the system sends a notice

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25   to the battery that it shifts to the normal operational mode and also stops the

26   subtraction of capacity data based on the consumption electric current value or

27   consumption electric power value in the low electric power consumption mode, and

28   enables capacity calculation by the current measurement circuit on the other hand.

6 (Canceled).

1   7 (Withdrawn) An intelligent battery for use with a portable electronic device having a

2   first system component for operating with supplied electric power in a normal

3   operational mode but not operating with no supplied electric power in the low electric

4   power consumption mode, and a second system component for operating with

5   supplied electric power both in the normal operational mode and in the low electric

6   power consumption mode, and a controller for supplying electric power to said first and

7   second system components in the normal operational mode and supplying electric

8   power to said second system component and stopping supply of electric power to said

9   first system component in the low electric power consumption mode, comprising:

10

11   (a) a timer;

12

13   (b) a mode shift notice receiving unit for receiving a mode shift notice indicating

14   a shift from the normal operational mode to the low electric power consumption mode

15   or a shift from the low electric power consumption mode to the normal operational

16   mode and a consumption electric current value or a consumption electric power value

17   in the low electric power consumption mode unique to the second system component;

18

19   (c) a unit for calculating capacity data to be subtracted based on a period of the

20   low electric power consumption mode after shifting to the mode measured by the timer

21   and the received consumption electric current value or consumption electric power

22   value in the low electric power consumption mode.

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1   8 (Withdrawn) An intelligent battery for use with a portabl   electronic device having a

2   first system component for operating with supplied electric power in the normal

3   operational mode but not operating with no supplied electric power in the low electric

4   power consumption mode, and a second system component for operating with

5   supplied electric power both in the normal operational mode and in the low electric

6   power consumption mode, and a controller for supplying electric power to said first and

7   second system components in the normal operational mode and supplying electric

8   power to said second system component and stopping supply of electric power to said

9   first system component in the low electric power consumption mode, comprising:

10

11   (a) a timer;

12

13   (b) a mode shift notice receiving unit for receiving a mode shift notice indicating

14   a shift from the normal operational mode to the low electric power consumption mode

15   or a shift from the low electric power consumption mode to the normal operational

16   mode and, based on a consumption electric current value or a consumption electric

17   power value in the low electric power consumption mode unique to the second system

18   component calculated on the system side, consumption battery capacity data assumed

19   to be consumed during the low electric power consumption mode;

20

21   (c) a unit for calculating capacity data to be subtracted based on a period of the

22   low electric power consumption mode after shifting to the mode measured by the timer

23   and the received consumption battery capacity data in the low electric power

24   consumption mode.

25

1   9 (Currently amended) A portable electronic device, comprising:

2

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3   (a) a first system component for operating with supplied electric power in the
4   normal operational mode but not operating with no supplied electric power in the low
5   electric power consumption mode;

6

7   (b) a second system component for operating with supplied electric power both
8   in the normal operational mode and in the low electric power consumption mode; and

9

10   (c) a controller for:

11

12   (i) performing control to supply electric power to said first and second
13   system components, and supply electric power to said second system
14   component and stop supply of electric power to said first system component in
15   the low electric power consumption mode;

16

17   (ii) when shifting from the normal operational mode to the low electric
18   power consumption mode, sending to an SBS-compliant intelligent battery a
19   notice of shifting to the low electric power consumption mode and also sending
20   a consumption electric current value or a consumption electric power value
21   unique to the system , the notice being defined in at least one command
22   selected from among OptionalMfgFunction1 to OptionalMfgFunction5 of SBS
23   , and

24

25   (iii) when shifting from the low electric power consumption mode to the
26   normal operational mode, sending from the system to the intelligent battery a
27   notice of shifting to the normal operational mode; and

28

29   said intelligent battery characterized by :

30

31   (iv) in the low electric power consumption mode, performing subtraction

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32   of capacity data bas d on the received consumption electric current value or

33   consumption electric pow r valu in th mode, and disabling capacity

34   calculation on the current measurement circuit on the other hand;

35

36   (v) when shifting from the low electric power consumption mode to the

37   normal operational mode, stopping the subtraction of capacity data based on

38   the consumption electric current value or consumption electric power value in

39   the low electric power consumption mode, and enabling capacity calculation by

40   the current measurement circuit on the other hand.

1   10 (Currently amended) A portable electronic device, comprising:

2

3   (a) a first system component for operating with supplied electric power in a

4   normal operational mode but not operating with no supplied electric power in a low

5   electric power consumption mode;

6

7   (b) a second system component for operating with supplied electric power both

8   in the normal operational mode and in the low electric power consumption mode; and

9

10   (c) a controller for:

11

12   (i) performing control to supply electric power to said first and second

13   system components, and supply electric power to said second system

14   component and stop supply of electric power to said first system component in

15   the low electric power consumption mode;

16

17   (ii) when shifting from the normal operational mode to the low electric

18   power consumption mode, sending from a system to an SBS-compliant

19   intelligent battery a notice of shifting to the low electric power consumption

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20   mode and also sending consumption battery capacity data assumed to be
21   consumed during the low   lectric power consumption mode based on a
22   consumption electric current value or a consumption electric power value in the
23   low electric power consumption mode unique to the second system component
24   calculated on the system side , the notice being defined in at least one
25   command selected from among OptionalMfgFunction1 to
26   OptionalMfgFunction5 of SBS, ; and
27
28   (iii) when shifting from the low electric power consumption mode to the
29   normal operational mode, sending from the system to the intelligent battery a
30   notice of shifting to the normal operational mode; and
31
32   said intelligent battery characterized by:
33
34   (iv) performing subtraction of the capacity data based on the received
35   consumption battery capacity data in the low electric power consumption mode,
36   and disabling capacity calculation on the current measurement circuit on the
37   other hand;
38
39   (v) when shifting from the low electric power consumption mode to the
40   normal operational mode, stopping the subtraction of capacity data based on
41   the consumption current capacity data in the low electric power consumption
42   mode, and enabling capacity calculation by the current measurement circuit on
43   the other hand.